

117TH CONGRESS
1ST SESSION

H. R. 5153

To require the Secretary of Defense to establish a cadre of software development and acquisition experts, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 3, 2021

Mr. BROWN introduced the following bill; which was referred to the Committee on Armed Services

A BILL

To require the Secretary of Defense to establish a cadre of software development and acquisition experts, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-
2 tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Defense Software Ac-
5 quisition Cadre Act of 2021”.

6 **SEC. 2. CADRE OF SOFTWARE DEVELOPMENT AND ACQUI-
7 SITION EXPERTS.**

8 (a) CADRE OF SOFTWARE DEVELOPMENT AND AC-
9 QUISITION EXPERTS.—

(1) Not later than January 1, 2022, the Secretary of Defense, acting through the Under Secretary of Defense for Acquisition and Sustainment, shall establish a cadre of personnel who are experts in development and acquisition of software. The purpose of the cadre is to ensure a consistent, strategic, and highly knowledgeable approach to developing and acquiring software by providing expert advice, assistance, and resources to the acquisition workforce in support of the policies established in accordance with Department of Defense Instruction 5000.02, Operation of the Adaptive Acquisition Framework, dated January 23, 2020.

1 cation, deployment of capabilities to the operational
2 environment, and maintenance. In performing such
3 duties, the experts shall—

4 (A) advise and assist in integration of
5 modern software development practices such as
6 agile software development; development, secu-
7 rity, and operations (DevSecOps); and lean
8 practices;

9 (B) advise and assist in leveraging indus-
10 try best practices for software development, de-
11 ployment, upgrades, and sustainment to include
12 contracting for software as a service, subscrip-
13 tion models, use of prime contractors to assist
14 in integration, and other methods for acquiring
15 or accessing capability;

16 (C) in conjunction with the Cadre of Intel-
17 lectual Property Experts established pursuant
18 to section 2322 of this title, develop a strategy
19 and licensing framework to enable government
20 procurement of commercial software, to in-
21 clude—

22 (i) in accordance with section 2377 of
23 this title, a preference for the acquisition
24 of commercial software under the license

customarily provided to the public, except as specified in paragraphs (ii) and (iii);

(ii) identification of terms or conditions that may be inconsistent with Federal procurement law;

(iii) identification of operational user needs that may necessitate the negotiation of customized licenses to ensure authorized use in unique operational environments;

and

(iv) methods and procedures for use of stand-alone software licensing in cases where other contract vehicles are inappropriate or unavailable;

(D) establish and lead cross-functional government-industry teams that include operational users, data and system architects, experts in artificial intelligence, developmental operational testers, software developers, cybersecurity experts to deliver software quickly and iteratively to meet the highest priority user needs;

(E) advise and assist in the development of requirements, acquisition strategy, product sup-

1 port strategy, and intellectual property strategy
2 for a system;

3 (F) advise and assist in planning and
4 budgeting for agile software development and
5 deployment, and the sustainment of software
6 over the life cycle of the program, to include
7 consideration of the shifting landscape of con-
8 tinual cyber threat and evolving cyber require-
9 ments;

10 (G) conduct or assist with financial anal-
11 ysis, cost estimation, and valuation of software,
12 to include agile software development, to in-
13 clude valuation of embedded software as a
14 standalone product or as part of modular open
15 system approach;

16 (H) assist in the drafting of a solicitation,
17 contract, or other transaction agreement;

18 (I) interact with or assist in interactions
19 with contractors, including communications and
20 negotiations with contractors on solicitations
21 and awards; and

22 (J) foster culture change necessary to en-
23 able the Department of Defense to embrace and
24 leverage modern software practices by—

(i) recommending policies to ensure program managers are empowered to set and maintain the integrity of agile development and prioritization, and

(ii) educating key stakeholders in considerations regarding the integration and incorporation of agile software development practices with systems acquired under the major capability acquisition pathway.

(4)(A) In order to achieve the purpose set forth in paragraph (1), the Under Secretary shall ensure the cadre has the appropriate number of staff and such staff possesses the necessary skills, knowledge, and experience to carry out the duties under paragraph (2), including in relevant areas of law, commercial software licensing, contracting, acquisition, logistics, engineering, financial analysis, cost estimation, and valuation. The Under Secretary, in co-ordination with the Defense Acquisition University and in consultation with academia and industry, shall develop a career path, including development opportunities, exchanges, talent management programs, and training, for the cadre. The Under Secretary may use existing authorities to staff the

1 cadre, including those in subparagraphs (B), (C),
2 (D), and (F).

3 (B) Civilian personnel from within the Office of
4 the Secretary of Defense, Joint Staff, military de-
5 partments, Defense Agencies, and combatant com-
6 mands may be assigned to serve as members of the
7 cadre, upon request of the Director.

8 (C) The Under Secretary may use the authori-
9 ties for highly qualified experts under section 9903
10 of title 5, to hire experts as members of the cadre
11 who are skilled professionals in software develop-
12 ment and acquisition, commercial software licensing,
13 and related matters.

14 (D) The Under Secretary may enter into a con-
15 tract with a private-sector entity for specialized ex-
16 pertise to support the cadre. Such entity may be
17 considered a covered Government support con-
18 tractor, as defined in section 2320 of this title.

19 (E) In establishing the cadre, the Under Sec-
20 retary shall give preference to civilian employees of
21 the Department of Defense, rather than members of
22 the Armed Forces, to maintain continuity in the
23 cadre.

24 (F) The Under Secretary is authorized to use
25 amounts in the Defense Acquisition Workforce De-

1 development Fund for the purpose of recruitment,
2 training, and retention of the cadre, including pay-
3 ing salaries of newly hired members of the cadre for
4 up to three years.

5 (G) In implementing this section, the Under
6 Secretary shall ensure compliance with applicable
7 total force management policies, requirements, and
8 restrictions provided in sections 129a, 2329, and
9 2461 of title 10, United States Code.

10 (H) The Under Secretary shall ensure that any
11 contractor employee providing services in support of,
12 or participation in, the cadre established under this
13 section and is considered a Special Government Em-
14 ployee as defined by section 202 of title 18, United
15 States Code, is required to file a confidential finan-
16 cial disclosure in accordance with the Ethics in Gov-
17 ernment Act of 1978.

